

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing mast arm Traffic Control Signal at the intersection of MD 188 (Wilson Ln) and Whittier Blvd. in Montgomery County. The pedestrian signals shall be upgraded to Countdown pedestrian signals with audible pushbuttons. MD 188 (Wilson Ln) is assumed to run an east-west direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA four-phase, semi-actuated mode, with the MD 188 (Wilson Ln) approaches continuing to run concurrently. The pedestrian phases across both legs of MD 188 (Wilson Ln) shall now be Countdown pedestrian phases with audible pushbutton actuation. The pedestrian phase across the north leg of Whittier Blvd. shall now be a Countdown pedestrian phase with audible pushbuttons on recall. Far-side sampling stations on both legs of MD 188 (Wilson Ln) via video detection shall remain in operation at this intersection. The Whittier Blvd. approaches shall also continue to run concurrently.
- The existing full-traffic-actuated, eight-phase controller with video interface and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.
- Montgomery County Signal Shop shall install APS control unit into controller cabinet. The APS push buttons should be delivered to Bob Ricketts at the Montgomery County Traffic for programming at least two weeks prior to the beginning of work.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by Montgomery County Forces. Contact Kamal Hamud at (240) 777-8761 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contacts for Montgomery County and SHA are as follows:

Mr. Cedric Ward
Assistant District Engineer - Traffic
Phone: (301) 513-7409

Mr. Vernon Stinnett
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Victor Grafton
Assistant District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Bob Ricketts
Signal Shop (Mont Co.)
301-279-1291

Mr. Sonny Bailey
Manager, Sign Shop Operations
410-787-7670

Mr. Kamal Hamud
Mont. County TMC Center
240-777-8761

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	6 SF
	Pedestrian education R10-3(1) sign (9"x15"). (Note: Sign to read "PUSHBUTTON TO CROSS WHITTIER BLVD".)	2 EA
	Pedestrian education R10-3(1) sign (9"x15"). (Note: Sign to read "PUSHBUTTON TO CROSS WILSON LANE".)	4 EA

EQUIPMENT LIST (cont.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	2 EA
2001	Class 2 Excavation.	2 C.Y.
2002	Test Pit Excavation	5 C.Y.
5003	Removal of existing permanent pavement line markings.	1140 L.F.
5004	12" white preformed thermoplastic pavement marking lines.	1050 L.F.
5005	24" white preformed thermoplastic pavement marking lines.	135 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	300 L.F.
6002	5" concrete sidewalk.	1450 S.F.
6003	Detectable warning surface for curb ramps	174 S.F.
8001	12" LED signal head section.	30 EA
8002	2 wire Central Control unit	1 EA
8008	Audible/tactile pedestrian pushbutton station & signs.	6 EA
8009	Breakaway Pedestal pole (10')	3 EA
8009	Breakaway Pedestal pole (5')	2 EA
8015	LED 16" countdown pedestrian signal head.	6 EA
8023	Remove and dispose of equipment per assignment.	1 EA
8033	Disconnect, pull back and reroute cable.	475 L.F.
8038	Schedule 80 rigid PVC conduit up to 4" - slotted.	90 L.F.
8039	Schedule 80 rigid PVC conduit up to 4" - trenched.	130 L.F.
8040	Wood sign supports up to 4"x6".	30 L.F.
8041	Install overhead or ground mounted sign (including all hardware).	6 S.F.
8043	No. 6 AWG stranded bare copper ground wire.	260 L.F.
8047	Furnish and install electrical handhole.	2 EA
8054	Electrical cable - 2 conductor (No. 14 AWG).	880 L.F.
8056	Electrical cable - 5 conductor (No. 14 AWG).	1000 L.F.
8057	Electrical cable - 7 conductor (No. 14 AWG).	330 L.F.
Neg.	Relocate existing ground mounted sign.	24 SF

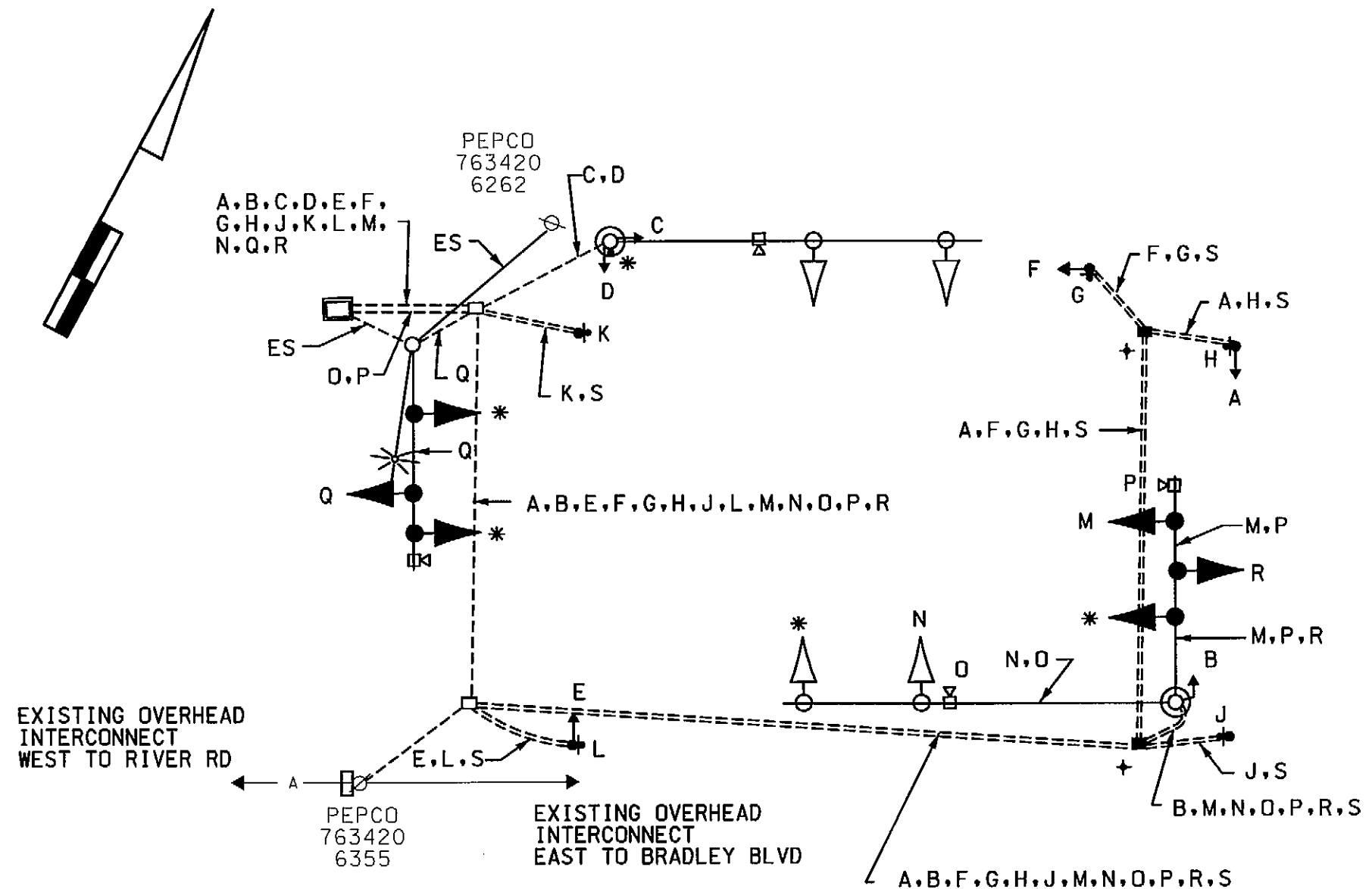
C. EQUIPMENT TO BE REMOVED

All removed signal materials are to become property of the contractor.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)						
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)						
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)						
PHASE 2 & 6	G	G	G	G	R	R	R	R	WK	WK	DW	DW	DW	DW
PED CLEAR / COUNTDOWN	G	G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	G	G	G	G	DW	DW	WK	WK	WK	WK
PED CLEAR / COUNTDOWN	R	R	R	R	G	G	G	G	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 & 8 ALT CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



TOD NO: XX655-04
SHA NO: M0972854
MD 188 @ Whittier Boulevard

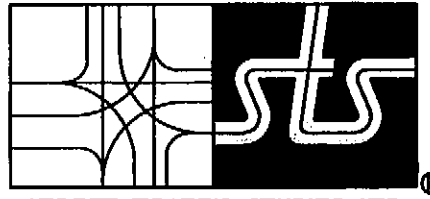
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

**MD 188 (WILSON LANE)
AND WHITTIER BLVD**

BETHESDA, MARYLAND

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	6/28/11	CONTRACT NO.	XX6555185
DESIGNED BY	ROB ZACHERL	COUNTY	MONTGOMERY		
DRAWN BY	ROB CICCHINI	LOGMILE	15018801.56		
CHECKED BY		TMS NO.	K439		
F.A.P. NO.		TOD NO.			
TS NO. 40E	DRAWING NO. 3 OF 3	SHEET NO.	OF		



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400 Crain Hwy., NW
Glen Burnie, MD 21061
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